ASSIGNMENT 5

Textbook Assignment: “Wood and Light Frame Structures.” Pages 6-1 through 6-51.

5-1. Of all the construction material, what material is considered the most often used and the most important?

1. Wood
2. Steel
3. Concrete
4. Plastic

5-2. In small construction projects that do NOT have written specifications included, where should you be able to find the type and classification of wood?

1. In the drawings themselves
2. In the bill of materials
3. In the special standards
4. In the special information sheets attached to the drawings

5-3. In construction, the terms “wood,” “lumber” and “timber” have distinct and separate meanings. Which of the following definitions is an accurate description?

1. Wood is a soft, nonfibrous substance
2. Timber is lumber with a dimension of not less than 5 inches
3. Lumber is trees that have not been cut
4. Wood is lumber that has been made into manufactured products

5-4. “Millwork” is best defined by which of the following descriptions?

1. Wood selected for sawmill work
2. Timber made into lumber
3. Lumber made into manufactured products
4. Wood after it has been through the sawmill

5-5. In what way, if any, can the nominal size of lumber be compared to its dressed size?

1. It is larger
2. It is the same
3. It is smaller
4. It cannot be compared

5-6. What designation applies to wood surfaced on two sides only?

1. S2S
2. S2E
3. SS2
4. 2SS

5-7. In which of the following ways is lumber designated on drawings and purchase orders?

1. Dressed only
2. Nominal only
3. Dressed or nominal, whichever you chose

IN ANSWERING QUESTIONS 5-8 AND 5-9, REFER TO TABLE 6-2 IN YOUR TEXTBOOK.

5-8. What are the dressed dimensions of a 1- by 8-inch board?

1. 1 by 8 in
2. 1 by 7 1/2 in
3. 3/4 by 7 1/2 in
4. 3/4 by 7 1/4 in

5-9. What are the dressed dimensions of a 2- by 4-inch, S4S board?

1. 2 by 4 in
2. 2 by 3 1/2 in
3. 1 1/2 by 3 1/2 in
4. 1 1/2 by 3 1/4 in

5-10. Manufactured lumber, when classified according to its use, falls into what three categories?

1. Boards, dimension, and timbers
2. Rough, dressed, and worked
3. Yard, structural, and factory
4. Boards, shop, and yard

5-11. When you want lumber to show its natural finish, what grade(s) should you use?

1. A only
2. B only
3. A or B, whichever you prefer
4. C

5-12. When grain-tight lumber is required, what type of lumber is normally used?

1. No. 1 common
2. No. 2 common
3. Grade A select
4. Grade B select

5-13. Which type of lumber is primarily graded by its allowable stresses?

1. Factory
2. Structural
3. Shop
4. Yard

5-14. To find the board foot measurement of lumber, what formula should you use?

1. $\frac{Thickness(in.)\ X\ width(in.)\ X\ length(in.)}{144}$

2. $\frac{Thickness(in.)\ X\ width(in.)\ X\ length(in.)}{12}$

3. $\frac{Thickness(in.)\ X\ width(in.)\ X\ length(ft)}{144}$

4. $\frac{Thickness(in.)\ X\ width(in.)\ X\ length(ft)}{12}$

5-15. When computing the amount of board feet in a dressed 2- by 4-inch board, which of the following dimensions should you use?

1. 1 3/4 by 3/4 in
2. 2 by 4 in
3. 1 5/8 by 3 5/8 in
4. 1 7/8 by 3 5/8 in

5-16. When you are laminating lumber, how are the laminations (pieces) fastened together?

1. Nailed and glued together, with the grain of all pieces running perpendicular
2. Nailed or glued together, with the grain of all pieces running parallel
3. Nailed, bolted, or glued together, with the grain of all pieces running perpendicular
4. Nailed, bolted, or glued together, with the grain of all pieces running parallel

5-17. Which of the following characteristics applies to plywood?

1. Punctureproof
2. Resists splitting
3. Pound for pound one of the strongest materials available
4. Both 2 and 3 above

5-18. Plywood is used for which of the following purposes?

1. Formwork
2. Sheathing
3. Furniture
4. Each of the above

5-19. What are the two most common sizes of plywood sheets available for use in construction?

1. 3 by 6 ft and 4 by 8 ft
2. 4 by 8 ft and 4 by 10 ft
3. 4 by 8 ft and 4 by 12 ft
4. 4 by 10 ft and 4 by 12 ft

5-20. How are plywood panel grades generally designated?

1. By the grade of veneer on the face only
2. By the kind of glue only
3. By the grade of veneer on the face and back only
4. By the kind of glue and the grade of veneer on the face and back

IN ANSWERING QUESTION 5-21, REFER TO FIGURE 6-6 IN YOUR TEXTBOOK.

5-21. What plywood veneer grade allows knotholes up to 2 1/2 inches in width and under certain conditions up to 3 inches?

1. A
2. B
3. D
4. N

5-22. When index numbers 48/24 appear on a grading identification stamp, what does the number 24 represent?

1. Minimum on-center spacing of supports for subfloors
2. Maximum on-center spacing of supports for roof decking
3. Maximum on-center spacing of supports for subfloors
4. Maximum on-center spacing of supports for wall studs

5-23. Which of the following types of plywood panels is/are recommended for use in cabinets?

1. Standard plywood sheathing
2. Decorative panels only
3. Overlaid panels only
4. Decorative panels and overlaid panels

5-24. Which of the following types of wood substitutes provides good fire resistance?

1. Fiberboard
2. Gypsum wallboard
3. Particleboard
4. Hardboard

5-25. The type and amount of wood treatment is normally given in the project specifications. When no written specifications exist, where should you be able to find the wood treatment required?

1. Bill of materials
2. Commercial standards
3. Drawings
4. American Plywood Association

5-26. In platform construction, what is the first wood structural member to be set in place?

1. Header
2. Joist
3. Soleplate
4. Sill

5-27. What is the difference between a common joist and a cripple joist?

1. A cripple joist extends the full span, but a common joist does not
2. A common joist extends the full span, but a cripple joist does not
3. A cripple joist may be supported by a girder, but a common joist is never supported by a girder
4. Common joists are supported by pilasters, while cripple joists are not

5-28. At a door opening in an exterior wood-framed wall, the names of the horizontal members that connect at the (a) top and (b) bottom of the cripple studs are

1. (a) header (b) soleplate
2. (a) top plates (b) soleplate
3. (a) top plates (b) header
4. (a) header (b) sill

5-29. Frame structures are commonly brat.ad by use of which of the following methods?

1. Diagonal bracing
2. Let-in bracing
3. Cut-in bracing
4. All of the above

5-30. What is the rise per unit of run for a 1/4 pitch roof?

1. 12 in
2. 6 in
3. 8 in
4. 4 in

5-31. What is the rafter whose lower end rests on the top plate and whose upper end rests against a hip rafter?

1. Common
2. Valley jack
3. Hip jack
4. Cripple jack

5-32. What rafter does NOT meet either the top plate or the ridgeboard?

1. Common jack
2. Cripple jack
3. Valley jack
4. Hip jack

5-33. For what purpose are purlins used in wood frame construction?

1. To serve as a nailer for roofing
2. To act as a structural connector
3. To support rafters
4. To serve as bracing for rafters

5-34. On flat or nearly flat roofs, what type of roof covering is generally used?

1. Galvanized iron sheets
2. Asphalt shingles
3. Tile
4. Built-up

5-35. On a built-up roof, what material provides the weathering surface?

1. Asphalt shingles
2. Aggregate
3. Roofing felt
4. Asphalt binder

5-36. On a boxed cornice, what is the trim that is nailed to the rafter ends?

1. Frieze
2. Crown molding
3. Fascia
4. Plancier

5-37. A gable roof has a total of how many eaves?

1. Five
2. Two
3. Three
4. Four

5-38. What type of common siding comes in lengths of more than 4 feet and widths of 8 inches or less?

1. Bevel
2. Drop
3. Clapboard

5-39. In an attic, which of the following conditions is NOT prevented by the installation of vapor barriers and insulation?

1. Heat loss
2. Heat gain
3. Moisture seepage
4. Condensation

5-40. What elements are the two principal parts of a stairway?

1. Stringers and risers
2. Treads and risers
3. Treads and stringers
4. Stringers and nosing

5-41. What type of stairway continues in a straight line from one floor to the next?

1. Change
2. Cleat (open-riser)
3. Platform
4. Straight-flight

5-42. A platform is needed between floors in what type of stairway?

1. Straight-flight
2. Platform
3. Reverse
4. Directional

5-43. In a structure, what are the two categories of stairs?

1. Principal and service
2. Main and porch
3. Basement and attic
4. Front and rear

5-44. What stairs extend between floors above the basement and below the attic?

1. Basement
2. Porch
3. Attic
4. Principal

5-45. Which of the following types of stairs is a service stair?

1. Porch
2. Principal
3. Personnel
4. Equipment

5-46. Into what two types, if any, is finish flooring broadly divided?

1. Resilient and carpet
2. Wood and concrete
3. Resilient and wood
4. None; it is not divided

5-47. What is the primary difference between exterior and interior flush doors?

1. An exterior flush door always swings to the outside of a building
2. Exterior flush doors have a solid core
3. Plywood is never used as the outside face of an exterior flush door
4. Interior flush doors may be fabricated on the construction site, but exterior flush doors are always factory-assembled

5-48. What are the principal parts of the frame of an inside door?

1. Head jamb and side jambs only
2. Head and side jams and head and side casings
3. Sill, head jamb, and side casings
4. Sill, side jambs, and head casing

5-49. What part of a window forms a frame for the glass?

1. Casement
2. Sash
3. Frame
4. Finish

5-50. What type of window contains several horizontal hinged sashes that open and close together?

1. Casement
2. Louver
3. Jalousie
4. Double-hung

5-51. In construction drawings, the window schedule provides what type of information?

1. Type of windows
2. Size of windows
3. Number of panes of glass for each window
4. Each of the above

5-52. When the figure 6/12 appears on one of the lights in the window schedule, the dimensions of the glass are what type?

1. Nominal
2. Rough
3. Actual
4. Finish

5-53. In interior trim, which of the following items is/are considered to be the most prominent?

1. Inside door casing only
2. Window casing only
3. Inside door and window casings
4. Doorframes

5-54. In the building construction trade, which of the following items are considered to be hardware?

1. Sliding door supports
2. Fastenings for screens
3. Strike plates
4. All of the above

5-55. Of the following materials, which are considered to be finishing hardware?

1. Fastenings for screens
2. Sliding door supports
3. Folding door supports
4. Automatic exit devices

5-56. Which of the following materials is/are considered to be rough hardware?

1. Special window hardware
2. Strike plates
3. Push plates
4. Escutcheon plates

5-57. Nails are classified according to what factor(s)?

1. Use and form
2. Length and thickness
3. Composition
4. Holding power

5-58. What type of nail is made from finer wire and has a smaller head than the common nail?

1. Box
2. Finishing
3. Plasterboard
4. Roofing

5-59. What type of nail has two functions: maximum holding power and easy withdrawal?

1. Roofing
2. Finishing
3. Box
4. Duplex

5-60. Which of the following characteristics should be included in a description of a roofing nail?

1. Round shafted, galvanized, short body, large head
2. Square shafted, galvanized steel, long body, medium-sized head
3. Specially hardened steel, noncorrosive
4. Triangular shafted, nongalvanized

5-61. The body of what type of nail is usually grooved or spiraled?

1. Plasterboard
2. Concrete
3. Masonry
4. Roofing

5-62. When used to describe the length of wire nails, a penny is indicated by what symbol?

1. a
2. b
3. c
4. d

5-63. The thickness of a wire nail is expressed by what designation(s)?

1. Number only
2. Letter only
3. Both number and letter
4. Size

5-64. What type of a nail is longer than 6 inches?

1. Roofing
2. Spike
3. Concrete
4. Plasterboard

5-65. Wood screws are designated according to what factors?

1. Type of head and material
2. Length and thickness
3. Type of thread
4. Body diameter

5-66. When ordinary wood screws are too short or too light or where spikes do NOT hold securely, what type of screw should be used?

1. Lag bolt
2. Special purpose
3. General purpose
4. Thread-cutting

5-67. What type of screw is self-tapping?

1. wood
2. Sheet metal
3. Lag
4. Brass

5-68. Sheet metal screws can fasten metal up to what maximum thickness?

1. 28 gauge
2. 30 gauge
3. 32 gauge
4. 34 gauge

5-69. What type of screws are used to fasten metals up to one-fourth inch thick?

1. Sheet metal
2. Thread-cutting
3. Lag
4. Flathead brass

5-70. What type of bolts, because of their lack of strength, are used only for fastening light pieces?

1. Carriage
2. Machine
3. Stove
4. Expansion

5-71. Of the following types of bolts, which should be used to fasten load-bearing members?

1. Lag
2. Expansion
3. Stove
4. Carriage

5-72. What type of bolt has a square section below the head that embeds into the wood to keep the bolt from turning?

1. Carriage
2. Expansion
3. Machine
4. Stove